How do the concepts compare with one another?

A matrix comparing each of the concepts was prepared to highlight the positive and negative impacts of each concept in relation to a set of measures of effectiveness that are described below.

- **Traffic Operations:** A measure of how well each intersection operates along Roeder Avenue and the extent of vehicle queue lengths along Granary Avenue, Roeder Avenue, and Central Avenue.
- **Connectivity and Access:** A measure of whether vehicle access and circulation is improved, and to what extent pedestrian and bicycle connections are enhanced and the quality of facilities that are provided.
- **Vehicle and Non-motorized Safety:** A measure that identifies how well each concept addresses common safety considerations such as the type of traffic control, sight distance, and separation of modes.
- **Cost:** The relative cost of the transportation improvements identified in each concept. *Does not include impacts to the Granary Building, environmental mitigation, site cleanup, or other non-transportation costs.*

<table>
<thead>
<tr>
<th>Existing Channelization</th>
<th>Concept A - No Widening of Roeder Ave South Connector (Minimize Building Impacts)</th>
<th>Concept B - Widening of Roeder Ave South Connector (Minimize Building Impacts)</th>
<th>Concept C - Minimize Impacts to Roeder Ave South Connector (Remove Granary Building)</th>
<th>Concept D - Close Central Ave (Remove Granary Building)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traffic Operations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersection LOS / Delay</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Vehicle Queuing</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Connectivity / Access</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle Access</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Bike Connectivity</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Pedestrian Connectivity</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Safety</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Non-Motorized</td>
<td>●</td>
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<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Motorized</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Costs</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Relative Costs</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Overall</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

**Good:** Meets all standards, improves connectivity and safety, and minimizes cost.

**Adequate:** Partially meets standards, provides for some improved nonmotorized facilities, does not address all safety concerns, and includes some larger cost items.

**Undesirable:** Does not meet operational or safety standards or includes significant cost items.

How can I find out more information about the project?

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What improvement concepts were developed?

Four improvement concepts were developed that highlight alternative roadway alignments for consideration. Each of the concepts has specific trade-offs that are briefly summarized below.

**Concept A:** No Widening of Roeder Ave South Connector (Minimize Building Impacts)
- Minimizes impacts to the Granary Building and moves the Granary Avenue alignment as far south as possible.
- Restripes the Roeder Avenue Bridge to three lanes by reducing the existing sidewalk and shoulder width.
- Requires a long right-turn lane on Granary Avenue due to sight distance limitations at the intersection from the proximity of the Granary Building, which prevents right turn on red vehicle movements.
- Includes a pedestrian activated crossing at Central Avenue, but the intersection at Central remains unsignalized.

**Concept B Issues to Consider:**
- Widens the Roeder Avenue Bridge to accommodate the existing 8 foot sidewalk and bicycle lanes in each direction.
- Significantly impacts the Granary Building because the intersection is on a curve, which requires the northwest approach to the intersection to be widened to meet roadway design standards due to the widening of the Roeder Avenue Bridge.
- Requires a long right-turn lane on Granary Avenue due to sight distance limitations at the intersection from the proximity of the Granary Building, which prevents right turn on red vehicle movements.
- Includes a traffic signal at Central Avenue to provide for improved operations at Central Avenue and protected pedestrian crossing phases.

**Concept C:** Minimize Impacts to Roeder Ave South Connector (Remove Granary Building)
- Requires removal of the Granary Building.
- Moves Granary Avenue closer to Central Avenue to operate both corridors as one signalized intersection to consolidate traffic operational movements.
- Restripes the Roeder Avenue Bridge to three lanes by reducing the existing sidewalk and shoulder width.
- No bicycle lanes are provided southeast of Granary Avenue in order to match the existing bridge width.

**Concept C Issues to Consider:**
- Requires removal of the Granary Building.
- Moves Granary Avenue closer to Central Avenue to operate both corridors as one signalized intersection to consolidate traffic operational movements.
- Restripes the Roeder Avenue Bridge to three lanes by reducing the existing sidewalk and shoulder width.
- No bicycle lanes are provided southeast of Granary Avenue in order to match the existing bridge width.

**Concept D:** Close Central Avenue (Remove Granary Building)
- Requires removal of the Granary Building.
- Moves Granary Avenue closer to the waterway to reduce the extents of widening along the Roeder Avenue Bridge.
- Closes the Central Avenue intersection to vehicles and re-routes traffic to Bay Street or C Street to improve overall corridor operations and access to the waterfront and Marine Trade areas.
- Moves the Roeder Avenue pedestrian crossing closer to Granary Avenue to provide a protected pedestrian phase, but will require relocation of the existing railroad automated gate.

**Concept D Issues to Consider:**